

DEVELOPING DIGITAL GREETINGS USING ADOBE ANIMATE

Haoyu Zhang ^{a,*}, Zhuowei Wang ^b

^a Beihang University, China, hazang@gmail.com

^b Beijing Information Technology University, China, zhg.wang@yahoo.com

Abstract

Greeting is an act of communication in which human beings intentionally make their presence known to each other, to show attention to, and to suggest a type of relationship. Expressing best wishes for someone, sending gifts or even sending a special message. However, the current life style in the IT era may shift sending message style. For them, smartphones and other digital media are more interesting than mail. This paper is intended to create a mobile-based greeting which contains a small game. Developing the application, the researcher conducts qualitative approaches of Multimedia Development Life Cycle (MDLC) that contains 6 stages, concept, design, obtaining content material, assembly, testing, and distribution. It is the utmost hope that the new IT-based greetings model could facilitate easier, more fun and interesting especially for children and youth. This research is still on going and the researcher would like to present a smartphone-based greetings model. Research findings show that mobile-based greetings including games is the most feasible model to send as a greeting message through WhatsApp and WeChat.

Keywords: mobile, multimedia, greetings, game, interactive

I. INTRODUCTION

Greeting is an act of communication in which human beings intentionally make their presence known to each other, to show attention to, and to suggest a type of relationship (usually cordial) or social status (formal or informal) between individuals or groups of people coming in contact with each other. Greetings are sometimes used just prior to a conversation or to greet in passing, such as on a sidewalk or trail. While greeting customs are highly culture and specific situation and may change within a culture depending on social status and relationship [1], they exist in all known human cultures. Greetings can be expressed both audibly and physically, and often involve a combination of the two. A greeting, or salutation, can also be expressed in written communications, such as letters and emails. People

from all walks of life have occasions they value and celebrate, unique to either their culture or religion. However, there are those moments in life that are valued in high esteem across all cultures and religions: one such is a person's birthday. Celebrating one birthday is practically the celebration of one's life. People tend to feel very moved when their loved ones recognize and celebrate their birthday. Expressing best wishes for birthday by organizing a birthday party, sending gifts or even sending a special birthday message; makes people feel appreciated and loved [2].

On a global scale, we read in an incredible pace like never before. We spend a great deal of time glued to a screen, reading digital media, social networks and other discussion forums. [3]. Although the internet is considered a crucial part of contemporary life, it also represents the state of emergency in risky behaviour. Many studies show that people can be addicted to internet, resulting harmful effects on social behaviour, habits and abilities [4]. Young children need to expe-

rience a wide range of pedagogical approaches including play in all its forms, to ask their questions, to initiate, to investigate and move beyond the 'religion lesson circle' into, in, through, across and around the environment. There are still many identified and unidentified challenges awaiting. The ongoing research into the theory and practice of early childhood religious education is imperative [5]. The urge of quality improvement of Bible learning and teaching drives institutions and family to transform education. The concept of quality in education is complex and multidimensional and has been defined in a variety of ways in different contexts by different stakeholders. Defining what quality means in higher education is hindered by the complexity of educational theory and practice. Different stakeholders, from practitioners and students to professional bodies and society in general have broad and competing views as to how they perceive quality to be [6]. These provide the impetus for the need to have continued quality improvements in the different educational processes.

The profile of youth changes over time, and the nature of parenting and community involvement deviates as well. However, the teaching methods in schools and universities is just about the same, with little understanding of how big the generation gap is. [6]. How young people learn is arguably linked to their future opportunities and well-being. For this reason, it is critical to identify each generation in how they process the world around them, how they engage with authority, how this impacts the family and the community, and what should be done to maximize the likelihood of them achieving their goals. A number of concepts have been brought together in an attempt to find teaching opportunities in the diverse and complex influences on the learning processes of the 21st century learner. We shall focus on three generations: Generation X (Gen X, 1965–1985); Generation Y (Gen Y, 1978–2000), also known as the Millennials; and Generation Z (Gen Z, 1995–2012) [7].

A. Digital Greetings

With technology growing to be an ever more important component of our day to day lives over the last few decades and the fact that it's continuing to do so, the advent of electronic greetings became inevitable. E-cards were used in the late

1990s when everyone in the US was just starting to have a personal computer at home – those may seem so dated now, with their low-resolution graphics and all, but in their day, it was quite an exciting thing to get an animated greeting card in the email. Electronic greetings can be delivered through several ways as attachment of message. [8]

Why game is used for greeting

The greatest take away from technology has become a valuable lesson in how to deliver a more powerful, memorable message. While these principles came out of hearing people speak, nowadays they apply across many mediums [9]. People want to hear positive, life-affirming things. They want optimism, hope, belief. They want the art of possibility. Give people an idea or dream of how life COULD be, if only we took action, or changed a behavior. Rally people around a common vision.

An estimated 62.9 percent of the population worldwide already owned a mobile phone in 2016. The number of mobile phone users in the world is expected to pass the five billion people by 2019. The mobile phone penetration is forecasted to continue to grow, rounding up to 67 percent by 2019 [10].

Easter Greeting

If one were to search for the word "Easter" you could find its mention only in the King James Version of Holy Bible, Acts 12:1-4. [11] "Now about that time Herod the king stretched forth his hands to vex certain of the church. And he killed James the brother of John with the sword. And because he saw it pleased the Jews, he proceeded further to take Peter also. (Then were the days of unleavened bread.) And when he had apprehended him, he put him in prison, and delivered him to four quaternions of soldiers to keep him; intending after Easter to bring him forth to the people."

Well, we must first look in-depth at the history of Easter and the details mentioned above to gain some understanding. Herod Agrippa I who ruled from 37 AD to 44 AD put James to death in the last year of his reign. When one thinks of Easter throughout history and in the 21st century, what day do we think of? Sunday, most likely. However, what day did Easter fall on in 44 AD?

Thursday.

Let's look at the Bible to find the meaning of Easter and how it relates to the resurrection of Jesus. Romans shows us that baptism instead of Easter was given as a symbol of Christ's death, burial, and resurrection. Romans 6:3-5 says, "Or do you not know that as many of us as were baptized into Christ Jesus were baptized into His death? Therefore we were buried with Him through baptism into death, that just as Christ was raised from the dead by the glory of the Father, even so we also should walk in newness of life. For if we have been united together in the likeness of His death, certainly we also shall be in the likeness of His resurrection"

What we see is that the true meaning is more than just a memorial for the resurrection one day a year with a church service. We can even celebrate the resurrection as we allow Christ's resurrection to become a reality in our lives as we live anew victoriously. Christ's death and resurrection is a daily hope of how the good will of God can overcome the forces of evil, of how truth will prevail and unmask the lie, of how love will triumph over sin, and how the blessed hope of eternal life will even put an end to death one day.

Many Christians celebrate Easter Sunday as the day of Jesus Christ's resurrection, which is written in the New Testament of the Christian bible. According to the Gospel of John in the New Testament, Mary Magdalene came to the tomb where Jesus was buried and found it empty. An angel told her that Jesus had risen. Easter is the day on which Christians celebrate the resurrection of Jesus Christ. The resurrection of Jesus Christ is the foundation of the Christian faith. Therefore, Easter Sunday is a holy day for Christians. Many Christians view that Easter Sunday is a day of new birth. [12]

II. Research Method

This study uses Multimedia Development Life Cycle (MDLC), a multimedia development method with stages that are carried out systematically to build a digital game, and consists of several stages as in Figure 1. Development is carried out by game developers, who are usually between one person to a large game industry [13].

Multimedia Development Life Cycle covers six phases, including: (1) Concept. The developer determines the type of game to be made; (2) Design.

Before a game is actually produced, it needs to be made: (a) Game Design Document. The document covers all aspects that are close to reality, so the making of the game includes aspects of prototype; (b) First prototype. At this stage a prototype is created that allows you to develop a method which fully implements your ideas; (c) Bug fixing and balancing. Identify bugs and overcome them in programming; (3) Obtaining Content Material. In this stage, collecting that will be used in the assembly phase, from marketplace or third party; (4) Assembly. In this stage, making game assets and source code is made. The results of this stage are games that can be played in the form of: (a) Formal Details prototype - a game that can be played with win-lose rules, the relationship between views, and works well; (b) Refinement prototypes - most mature prototypes only require beautifying work and are almost perfect to market; (4) Testing. Thorough evaluation of the game in seeing its suitability in appearance, values, concepts, and design. Testing is done to determine whether the game can run well, after programming. The result of this stage is that all bugs must be removed, or changes made in the programming. Many developers do this testing by distributing their products widely through online, so that more input is obtained. The result of this stage is the readiness of the game to be marketed; (6) Distributin. In this stage several things are done namely bug fixes, special show premiere, marketing, community management.

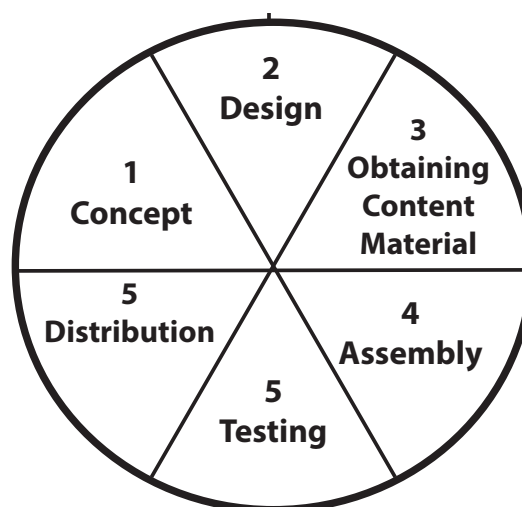


Figure 1 Multimedia Development Life Cycle [13]

A. Research Object

The object of the research is digital greetings application, and the research locations are conducted in Jakarta and some cities in Indonesia. Respondents consist of youth and Subject Matter Expert (SME) in communication, theology, multimedia and information technology.

B. Data Analysis

The data is analyzed using the analytical descriptive method and interpreted in a narrative way based on the research findings. Analyzing and data processing carry out with six stages including data gathering, preparing data for analysis, careful reading, developing the code, presenting the data and analyzing the data [14]. The data is collected from interviews and questionnaires with details: (1) Questionnaires with open-ended questions are used to find useful information that supports the theory, the information is needed for model development, information on whether a student can perform the command to play the mobile mathematics game, as well as assessing the quality of the learning model that is developed, (2) Interviews with open-ended questions are used, hence respondents can give information that is not limited from different perspective. Depth interviews are necessary to obtain data about the product and the learning process to play the game. All interview transcripts are stored in text documents; (3) Observations are conducted to obtain data about the learning process while playing the game.

III. RESULTS AND DISCUSSION

A. Concept

The first phase of Multimedia Development Life Cycle data collection was conducted using open-ended questionnaire and interview in three cities. The respondents were mostly young people with smartphones gave answers to these questions.

Questionnaires used in the first phase

1. If you compare digital greetings with printed one, could you explain which one is interesting and easy to use?
2. How do you greet your friends? There are many methods as shake hands, mail a greeting card, send messages using smartphones?

3. People need interactive media using smartphones, playing augmented reality, and games, but some people still like printed greeting card. How about you?
4. According to your opinion, which parts of text greeting message is interested to you?
5. According to your opinion, which parts of text greeting message is not interested to you?

Data was collected from 34 young people. After processing the data using NVivo qualitative data processing software, the greeting model may be designed. In answering the the above questions, majority of the respondents stated the following statements.

1. Most of the respondents prefer internet and social media over book and printed media.
2. Most respondents prefer sending message through smartphones.
3. Most of respondents always use smartphone for everyday activities, getting information for enhancing their knowledge, and sending message.
4. Almost all respondents agreed that the image of message is interesting.
5. Many respondents are not fond of the long text in the message.

B. Design

The second phase Pre-production would be to decide the concept of applications developed and storyboard design.

Game design document

Based on the research findings and discussion of the researchers and clients, the Easter greetings model would be formed as described in Table I.

Table I. The concept of Easter greetings application

Object	Description
User	Children, Youth
Topics	Easter: - Introducing eggs - Counting eggs - Maze - Arithmetic operation of eggs - Happy Easter
Application	Mobile game - Mobile game will be able to be download from Play Store
Multimedia object	image, animation, text
Interactivity	Games, using button, touch screen
Character style	Created based on a children book published by Indonesian Bible Society

First Prototype

Storyboards was used to present the whole stories of the application. An example of storyboard can be seen in Table II.

Table II. Storyboards

Image Storyboard	Start: Drawing a girl and eggs with landscape background. Button: Start and Exit Description: Player should click Start button to start playing.
Image Storyboard	Numbers of eggs: Six eggs including two blue eggs. Symbol: Number 1 ... number 5 Description: Player should search the number symbol that corresponds to blue eggs.
Image Storyboard	Collecting Eggs: There are 5 color eggs with many kinds of fruits. Button: Check button Description: Player should collect the eggs, and press button after he has collected five eggs.
Image Storyboard	Color of Egg: There are five color eggs including one is blue. Button: Blue egg button Description: Player should select the blue egg, and a message appears that it is right.
Image Storyboard	Arithmetic operation: There are four color eggs. Button and symbol Symbol +, 1, ... 5 including button 2 Description: Player should select number symbol and if it is right, a message appears that it is OK.
Image Storyboard	Maze: There is a road with bordered by wall, with many hushes and crocodile. The destination is a castle Player: A girl. Description: The player should go to the destination. If she makes a collision with crocodiles, the game will restart. If she succeeds in getting the castle, she wins, and the game is over with a picture of Jesus.

C. Obtaining Content Material

The third phase was the stage that assets were collected for use in the next phase.

D. Assembly

The third phase Production was the stage that the preliminary game was produced. Adobe Animate was used to produce the game, that the display can be seen in Figure 2.

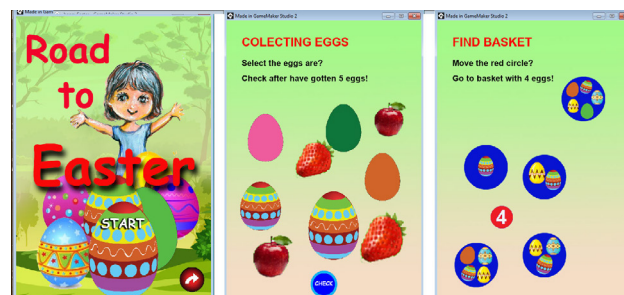


Figure 2 Display of the beginning of the game

F. Testing

The fourth phase Testing was the stage that the preliminary game was tested. The evaluation of the game conducted by expert in theology, communication, and information technology. The evaluation of preliminary product was conducted by subject matter expert in education, information technology, and social science, individual testing, and testing of small groups, then the product was revised. Below are the questionnaires that should be used by subject matter expert to evaluate the application.

Questionnaires used in the fourth phase

1. Is the content organized well in order completing the topic?
2. Does the graphic interface meet the principle of graphic design?
3. Does the flow of information meet the general user requirement?
4. Can user access the scene his/her need in proper time without an error?
5. Can the application run on variety of mobile device?
6. Can the application run on mobile device anywhere?
7. What is the feature to be improved?

As a result of answering the above questions, the expert of three kinds of fields namely educa-

tion, information technology, they stated the following statements.

1. Most of respondents stated that the content was organized well and it should be enriched with the new subject.
2. Most of respondents stated that the backgrounds and text looked good. It would be better if the resolution of images could be improved.
3. Most of respondents stated that the flow of information was moderate.
4. Most of respondents stated that the user can access the application moderately. The application could not be accessed using internet network. One of the experts was not sure if it would run on mobile phone using internet well without delay. Audio and image should be synchronized.
5. Unfortunately the application cannot run on mobile device easily. Some users do not know how to install the file with APK format on their mobile device.
6. The application can be accessed anywhere using internet network, unless the bandwidth is too low. But it is good including the multimedia content access.
7. The application could be built in the APK format and published at Play Store and AppStore, so audience can download using their mobile phone easily.

As a result of the Testing phase, the application should be revised and fix the problem based on the evaluation. .

IV. RESEARCH LIMITATION

Limitations of research in model development: (1) The research and development that consists of 5 phases is still in progress, and only the first until fourth phase was conducted: and (2) The fifth and sixth phase will be conducted after the application will have been revised.

V. CONCLUSION

Based on the objectives and the results obtained in this initial study, it can be concluded as follows:

- (1) The information derived from the initial research is used as a guideline for developing

mobile learning;

- (2) The Developing of Digital Greeting based on Game Development Life Cycle that consists six phases.
- (3) The first until fourth phase has been conducted. The research findings show that digital greeting is a model of message that can be developed.

For future work, the Digital Greeting model needs to be developed in the next phases.

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